

REMARKS

Claims 1-3 and 5-14, all the claims pending in the application, stand rejected. Claims 1 and 2 are amended. In each of the amended claims 1 and 2, "said glass substrate being made of a SiO₂-TiO₂ glass" is based on the description of page 8, line 9 from the bottom of the original specification.

Claim Rejections - 35 USC §103

Claims 1-3, 5, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi et al (US 2002/0179576) in view of Taylor (US 5,761,790). This rejection is traversed for at least the following reasons.

The Examiner asserts that Takeuchi discloses a method for fabricating a glass substrate which is suited for photomasks/mask blank used in photolithography, the glass substrate having a flatness of 0.01 microns (page 2, paragraph 0015), which reads on a mask blank being used in a transfer mask which is for use with F2 excimer laser light since the glass substrate for an EUV mask blank required to have a flatness of 0.05 microns or less as disclosed in page 6 of the instant specification. The Examiner asserts that the claimed steps are taught in Takeuchi. The Examiner admits that Takeuchi fails to specifically disclose performing a non-contact polishing step of polishing/float polishing, the surface of the glass substrate subjected to the local machining by the action of a machining liquid comprises water interposed between the surface of the glass substrate and a surface of a polishing tool without direct contact therebetween. The Examiner looks to Taylor for a teaching at col. 7, lines 10-27, that the Examiner asserts would be used in Takeuchi since Taylor discloses that the non-contact polishing tool introduces little or no subsurface damage and it has a significant lower production cost than traditional methods (col. 3, lines 60-67; col. 4, lines 1-5).

In the Response to Arguments section of the Office Action, the Examiner addresses the several arguments made by Applicants to distinguish over Nakagawa.

However, each of claims 1 and 2 has been amended to read “said glass substrate being made of a $\text{SiO}_2\text{-TiO}_2$ glass.” Neither Takeuchi et al nor Taylor, alone or in combination discloses use of the glass substrate doped with Ti. That is, use of the glass substrate made of a $\text{SiO}_2\text{-TiO}_2$ glass is never disclosed in any one of the cited documents.

Thus, Applicants respectfully submit that amended claims 1 and 2 are patentable. Furthermore, Applicants submit that remaining claims 3, 5-14 are also patentable because they depend from the patentable claims 1 and 2.

Claims 6-8, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi et al (US 2002/0179576) in view of Taylor (US 5,761,790) and further in view of Ohnuma (US 6,924,068)). This rejection is traversed for at least the following reasons.

The Examiner supplements the rejection of Takeuchi et al in view of Taylor because of admitted deficiencies and because the Examiner believes that Ohnuma discloses a method for fabricating a photomask comprises the step of patterning the thin film and transferring the thin film pattern of the transfer mask onto a glass substrate by lithography (col. 4, lines 53-60). However, Ohnuma does not remedy the deficiency of Takeuchi et al or Taylor in failing to teach use of the glass substrate made of a $\text{SiO}_2\text{-TiO}_2$ glass.

In short, none of Takeuchi et al (US 2002/0179576), Taylor (US 5761790), and Ohnuma (US 6924068), taken alone or in combination, discloses use of the glass substrate doped with Ti, more specifically, use of the glass substrate made of a $\text{SiO}_2\text{-TiO}_2$ glass. Thus, amended claims 1 and 2 are patentable, and the claims dependent thereon also are patentable.

AMENDMENT UNDER 37 C.F.R. § 1.111
Application No.: 10/809,523

Attorney Docket No.: Q80755

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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